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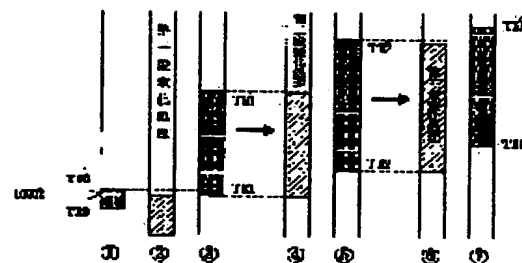
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(54) HIGH MELTING POINT METALLIC ALLOY MATERIAL HAVING HIGH TOUGHNESS AND HIGH STRENGTH

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a high m.p. metallic alloy material improved in toughness and strength.

SOLUTION: A metallic element for forming nitrides entered into solid solution in an alloy working material using one kind among Mo, W and Cr as a mother phase is subjected to internal nitriding at a low temp. equal to or below the upper limit temp. of recrystallization, by which superfine nitrides are dispersedly incorporated therein to increase the lower limit temp. of the recrystallization of the working material, the working material subjected to the internal nitriding is subjected to secondary nitriding at a temp. equal to or above the lower limit temp. of recrystallization, by which a stabilized structure in which superfine nitride precipitated grains are grown while at least the surface side of the working material retains a worked structure is obtd.



LEGAL STATUS

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